The Steninae obtained by the 1985 Geneva Museum Expedition to Thailand (Coleoptera, Staphylinidae)

25th contribution to the knowledge of Staphylinidae

by

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Illustrated by 10 figures

ABSTRACT

The list of the Steninae collected in Thailand for the Geneva Natural History Museum by I. Löbl and D. Burckhardt is presented. Six known species are recorded for the first time from Thailand, and the following others described as new: Stenus kamhaengi n. sp., S. burckhardti n. sp., S. mongkuti n. sp., S. guenai n. sp., S. explanipennis n. sp. and S. thanonensis n. sp. A further two forms are described as new but not named.

Although most of the thirty one species obtained by my Geneva Museum colleagues have already been recorded from Thailand, I think it useful to publish the complete list, for collections were made in interesting localities, particularly national parks, which were hitherto unexplored for Staphylinidae. The new material studied here adds 14 taxa of Steninae to the 81 already recorded from Thailand (the complete list of these may be found in Rougemont 1983 and Puthz 1985: Revision der Gruppe des Stenus (Hypostenus) bispinus Motschulsky. *Dtsch. ent. Z.* 32: 75-100). Thirty seven of the species of Thai Steninae have been taken from Doi Suthep Natural Park, often visited because of easy access from Chieng Mai; twenty-nine are now known from Doi Inthanon, where Staphylinidae have only been collected on three occasions, but is certainly one of the richest localities in Thailand. The new material from some of the southern national parks is of particular interest; the discovery of

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new species and of others associated with the mountains of North Thailand and Burma in such relatively low altitude sanctuaries as Khao Sabap and Khao Yai contributes in a modest way to demonstrate the vital necessity of preserving these remnants of the natural flora, more particularly in a country which has been devastated by large scale deforestation in the past twenty years.

The methods and values of measurements used in this paper are those employed in previous articles by the same author.

SYSTEMATIC LIST AND DESCRIPTIONS OF NEW SPECIES

Dianous ocellatus Cam.

Dianous ocellatus Cameron, 1930. Faun. Brit. India, Col. Staph. 1: 430.

27 exx.: Mae Hong Son, Tom Lok, 8 km N. Mae Lang 700 m, 14.XI.1985 (in Mus. Geneva; 5 exx. in coll. Rougemont).

New to Thailand. Previously known from Assam and Vietnam.

Stenus (s. str.) lomholdti Rgmt.

Stenus lomholdti Rougemont, 1983, Nat. Hist. Bull. Siam Soc. 31: 20.

4 ♂ ♂ and 2 ♀ ♀: Chiang Mai, Doi Inthanon 2500 m, 19.XI.1985 (in Mus. Geneva; 2 exx. in coll. Rougemont).

This species was described from material collected in the same locality by members of the Copenhagen Museum. No other records are known.

Stenus (s. str. and Nestus) kamhaengi n. sp.

or Holotype, 2 or or and 3 ♀ ♀ Paratypes: Chiang Mai, Doi Suthep 1400 m, 5.XI.1985, 1 or and 3 ♀ ♀ Paratypes: Chiang Mai, Mae Nang Kaeo, 900 m, 54 km NE Chiang Mai, 3.XI.1985. (Holotype and 6 Paratypes in Mus. Geneva; 2 Paratypes in coll. Rougemont; 1 Paratype in coll. Puthz.)

This new species belongs to the javanus group, which includes only three other species. It is the first member of the group with maculate elytra.

Length: 3.1-3.4 mm. Black, moderately shiny; each elytron with an elongate red spot of variable extent; legs, palpi and antennae testaceous, the terminal segments of the latter somewhat infuscate.

Head distinctly narrower than elytra in Holotype (60: 65) and in the Paratypes from Doi Suthep; in the three exx. from Mae Nang Kaeo the elytra are smaller, about as broad as the head, their surface more depressed, uneven and slightly more constricted anteriorly, although the insects remain fully winged. The eyes are large, projecting posteriorly beyond the concave base of head; vertex broad (average distance between eyes: 34), not deeply depressed, with a shallow sulcus on either side of the broad (13) feebly raised median portion. Puncturation moderately coarse, the average diameter of punctures greater than the section of third antennal segment, less than the section of segment II, and rugose, the

interstices slightly broader is postero-median area, but nowhere broader than half the diameter of punctures; the narrow interstices are shiny, devoid of microsculpture. Antennae short, barely extending to half the length of pronotum.

Pronotum almost as long as its breadth (46), broadest at anterior 3/8ths, strongly contracted foreward and posteriorly, the sides only slightly sinuate. The surface is convex, homogenously sculptured in the same way as the head, albeit with averagely slightly broader, punctural interstices.

Elytra (Holotype) transverse (65: 55; length of suture: 40), convex, strongly dilated posteriorly (breadth just behind humeral angles: 55); the surface is uniformly sculptured in the same way as the pronotum. In the Holotype the obscure reddish-testaceous spot is scarcely elongate, its diameter about 3/8ths the total length of elytron.

Abdomen strongly tapered, with narrow, sharply edged paratergites; average breadth of paratergite IV: 3, or equal to that of first antennomere. The puncturation of abdominal tergites is very coarse, the diameter of punctures on the first visible segments as great as those of the fore-body, but more regular, distinctly elongate, their interstices consequently predominantly longitudinal, and shiny; the puncturation is scarcely less coarse on segments VI-VIII. Paratergites bear a single longitudinal row of somewhat smaller punctures. Sternite IX with a single stout apico-lateral tooth.

Length of metatibia: 50; length of metatarsus: 32; first tarsomere (8.5) scarcely shorter than the last (9).

Male: Legs unmodified. Sternite VII unmodified in outline, but with finer and denser puncturation in apico-median area; sternite VIII with a deep, broad emargination. Adeagus (Fig. 1) with characteristically shaped parameres, the external portion of the explanate preapical parts membranous, translucent, and tending to deform when dry; the apex of the median lobe bears a prominent median ventral keel.

Female: Apico-lateral teeth of valvifers commensurate with those of male ninth sternite.

In Puthz' key to the *Stenus* s. str. and *Nestus* of the Orient (1980) *S. kamhaengi* n. sp. runs to *S. javanus* Bnh., which species it most closely resembles. Apart from its maculate elytra, which distinguishes the new species from all others of this phyletic group, it differs in the shape of the pronotum, the broadest point of which is situated further foreward than in both *S. javanus* and in *S. spongifera* Cam., and in its longer tibia (metatibia: 50: 45) and very slightly shorter tarsi (32: 34).

Stenus (s. str. and Nestus) beesoni Cam.

Stenus beesoni Cameron, 1930, Faun. Brit. India, Col. Staph. 1: 346. Stenus beesoni, ROUGEMONT 1983, Nat. Hist. Bull. Siam Soc. 31: 22.

1 ♀: Mae Hong Son, Tom Lok, 8 km N Mae Lang 700 m, 11, 13.XI.1985; 1 ♀: Chiang Mai, Doi Suthep, 1050 m, 5.XI.1985; 1 ♀: Chiang Mai, 33 km NE Chiang Mai, 500 m, 3.XI.1985 (in Mus. Geneva).

Stenus (s. str. and Nestus) megacephalus Cam.

Stenus megacephalus Cameron, 1929, J. Fed. Malay States Mus. 14: 448. Stenus megacephalus ROUGEMONT 1983, Nat. Hist. Bull. Siam Soc. 31: 22.

1 ♂ and 3 ♀ ♀: NE Bangkok, Khao Yai Nat. Park 750-850 m, 26.XI-3.XII.1985 (in Mus. Geneva).

Stenus ("Tesnus") articulipenis Rgmt.

Stenus articulipenis Rougemont, 1981, Annali Mus. cv. Stor. nat. "Giacomo Doria" 83: 378.

Stenus articulipenis ROUGEMONT 1983, Nat. Hist. Bull. Siam. Soc. 31: 3.

1 Q: Chiang Mai, Rd. to Wab Pang An, 50 km NE Chiang Mai 900 m, 3.XI.1985; 1 Q: Chiang Mai, 33 km NE Chiang Mai 500 m, 3.XI.1985 (in Mus. Geneva).

Only known from North Thailand.

Stenus ("Tesnus") aspericollis Rgmt.

Stenus aspericollis Rougemont, 1983. Nat. Hist. Bull. Siam Soc. 31: 39.

1 ♀: Chiang Mai, Doi Suthep 1050 m, 5.XI.1985 (in Mus. Geneva).
Only known from North Thailand. The male remains unknown.

Stenus (Hypostenus) thanonensis n. sp.

Stenus angusticollis Epp. (small form), ROUGEMONT 1983, Nat. Hist. Bull. Siam Soc. 31: 31 (Figs.).

Stenus angusticollis, PUTHZ 1983, Reichenbachia 21, 1: 6.

1 Holotype, 7 ♂ ♂ and 5 ♀ ♀ Paratypes: Thailand, Chiang Mai, Ban Hua Mo, 12.III.1982, G. de Rougemont (in coll. Rougemont); 1 ♂ Paratype: Phetchaburi, Kaeng Krachan Nat. Pk. 300-400 m, 17.XI.1985 (in Mus. Geneva).

Having examined further material of this taxon since the publication of my 1983 article, I am convinced that it should be named as a new species. Its diagnostic differences with S. angusticollis Epp. and with S. cylindricollis Boh. are given (in ROUGEMONT 1983) together with a figure of the aedeagus of the specimen which I now designate Holotype, and need not be reproduced here.

Stenus (Hypostenus) fulvescens Mots.

Stenus fulvescens Motschulsky, 1857, Bull. Mosc. 30: 515. Stenus fulvescens, ROUGEMONT 1983, Nat. Hist. Bull. Siam Soc. 31: 29.

1 ♀: Phetchaburi, Kaeng Krachan Nat. Pk. 450 m, 19.XI.1985; 1 ♥: Chiang Mai, Doi Inthanon 2450 m, 9.XI.1985; 1♀: Chiang Mai, Mae Nang Kaeo 900 m, 54 km NE Chiang Mai, 3.XI.1985; 2 ♥ ♥: Mae Hong Son, Tom Lok, 8 km N Mae Lang 700 m, 11, 13.XI.1985 (in Mus. Geneva; 1 ex. in coll. Rougemont).

This species was described from "Ind. Or.", and only known with certitude from Thailand where I have found it in a wide ranging number of localities. The four specimens from North Thailand in the new material are the darkest forms yet known, with entirely black dorsal surfaces, and only small patches of fulvous on parts of the ventral surfaces. The ex. from Phetchaburi Province, the most southerly known locality of its occurence, is also exceptionally dark; on the dorsal surface only the frons is depigmented. As the degree of pigmentation appears to correlate with dates rather than with distribution patterns, it seems possible that it is determined by climatic factors.

Stenus (Hypostenus) pustulatus Bnh.

Stenus pustulatus Bernhauer, 1914, W.Z.B. 64: 95.

Stenus pustulatus, ROUGEMONT 1983, Nat. Hist. Bull. Siam Soc. 31: 28.

1 o and 1 ♀: Chanthaburi, Khao Sabap Nat. Park, 150-300m, 23-24.XI.1985 (in Mus. Geneva).

Stenus (Hypostenus) persimilis Cam.

Stenus persimilis Cameron, 1930, Faun. Brit. India, Col. Staph. 1: 367.

10: Chiang Mai, Doi Inthanon 1650 m, 7.XI.1985 (in Mus. Geneva).

I had already taken this species in Thailand (1 °: Doi Inthanon, 2500 m, 15.III.1982), but omitted to include the record in my 1983 article. It is therefore new to Thailand. The species is otherwise known only from Burma.

Stenus (Hypostenus) subsimilis Bck.

Stenus subsimilis L. Benick, 1942, Ark. Zool. 33A, 17: 22.

10: Chiang Mai, Doi Suthep 1400 m, 5.XI.1985 (in Mus. Geneva).

New to Thailand. The species was described from NE Burma, and I have taken it in the Shan States: 15 exx.: Kalaw, 19.III.1982, and 1 ex.: Taunggyi, 14.I.1981 (in coll. Rougemont).

Stenus (Hypostenus) cursorius Bck.

Stenus cursorius L. Benick, 1921, Ent. Mitt. 10: 193.
Stenus cursorius, ROUGEMONT 1983, Nat. Hist. Bull. Siam Soc. 31: 25.

19: Chiang Mai, Doi Suthep 1600 m, 4.XI.1985 (in Mus. Geneva).

Stenus (Hypostenus) monomerus Fv.

Stenus monomerus Fauvel, 1895, Revue Ent. 14: 214.

Stenus monomerus, ROUGEMONT 1983, Nat. Hist. Bull. Siam Soc. 31: 23.

7 exx.: Chantaburi, Khao Sabap Nat. Park 150-300 m, 23-24.XI.1985 (in Mus. Geneva).

Stenus ("Hypostenus") subguttalis Puthz

Stenus subguttalis Puthz, 1969, Bull. Inst. r. Sci. nat. Belg. 45: 22. Stenus subguttalis, ROUGEMONT 1983, Nat. Hist. Bull. Siam Soc. 31: 36.

 $2 \circ \circ$: Chiang Mai, Mae Nang Kaeo 900 m, 54 km NE Chiang Mai, 3.XI.1985; $4 \circ \circ$ and $3 \circ \circ$: Chiang Mai, Rd to Wab Pang An, 50 km NE Chiang Mai 900 m, 3.XI.1985; $3 \circ \circ$ and $6 \circ \circ$: Chiang Mai, Doi Suthep 1450 m and 1550 m, 4 and 5.XI.1985 (in Mus. Geneva; 4 exx. in coll. Rougemont).

This species is new to Thailand. I included it in my key to the continental species of the guttalis group in my 1983 article, and gave a figure (11A) of the aedeagus. It was described from the Karen Hills of Burma, and I am able to provide a further record from South Shan State: 1 : Kalaw, 19.III.1982, G. de Rougemont (in coll. Rougemont).

Stenus ("Hypostenus") variipennis Rgmt.

Stenus variipennis Rougemont, 1983, Nat. Hist. Bull. Siam Soc. 31: 35.

4° o and 5° ♀: Phetchaburi, Kaeng Krachan Nat. Park 300-450 m, 17 and 19.XI.1985; 1° and 3° ♀: NE Bankok, Khao Yai Nat. Park 750-850 m, 1150 m, 26.XI-3.XII.1989; 2° o: Chanthaburi, Khao Sabap Nat. Pk. 300-400 m, 17.XI.1985; 2° ♀: Chiang Mai, Mae Nang Kaeo 900 m, 54 km NE Chiang Mai, 3.XI.1985 (in Mus. Geneva).

Stenus ("Hypostenus") burckhardti n. sp.

or Holotype, 3 or or and 6 ♀ ♀ Paratypes: Mae Hong Son, Tom Lok, 8 km N Mae Lang 700 m, 11, 13.XI.1985 (Holotype and Paratypes in Mus. Geneva; 2 Paratypes in coll. Rougemont; 1 Paratype in coll. Puthz).

This new member of the guttalis group is phyletically closest to *S. variipennis* Rgmt and *S. iniquus* Bck. A brief comparison with these taxa is considered sufficient for its diagnosis.

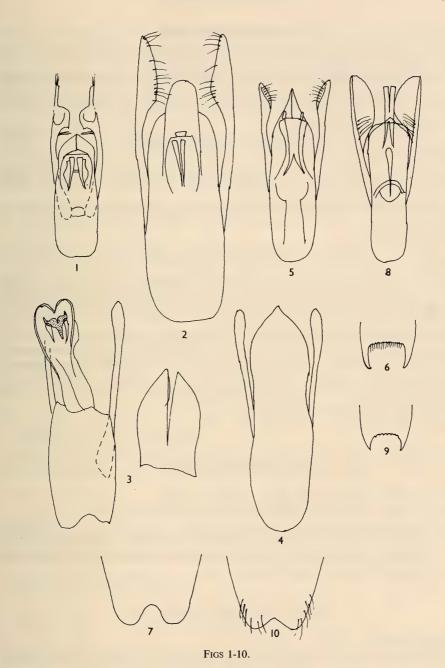
Length: ca. 6 mm. Facies, colour, sculpture and gauge of puncturation as in *S. variipennis* Rgmt., but altogether larger. Proportions of Holotype: Breadth of head: 102; length of antenna: 120; length of pronotum: 77; breadth of pronotum: 72; maximum length of elytron: 90; breadth of elytra: 103; length of metatibia: 100; length of metatarsus: 60. Apico-lateral teeth of ninth sternite acute, longer than in *S. variipennis*, comparable to those of *S. guttalis* etc. (see Rougemont 1983, Fig. 12 A, B, C). Microreticulation of abdominal tergites III-VII slightly stronger than in *S. variipennis*, weeker than in *S. iniquuus*, comparable to that of *S. guttalis* Bck.

In my key to the continental members of the guttalis group (1983) the new species runs to S. guttalis Bck. and S. subguttalis Puthz owing to the length of the teeth of the ninth abdominal sternites. The aedeagus shows that it is closer to S. variipennis and to S. iniquus, but differs from both these in the longer parameres, which extend fully 1/6th of the total length of the aedeagus beyond the apex of the median lobe. The dilated apices of the parameres are long and narrowed anteriorly, whereas they are triangularly spatulate in S. iniquus, and very narrowly dilated in S. variipennis.

Stenus ("Hypostenus") mongkuti n. sp.

or Holotype and 1♀ Paratype: Chanthaburi, Khao Sabap Nat. Park 150-300 m, 23-24.XI.1985. (Holotype in Mus. Geneva; Paratype in coll. Rougemont).

This new species lacks the meta-tibial spurs which are characteristic of the guttalis group, but the strongly sclerotised V-shaped expulsion clasp of the aedeagus shows that it belongs to that group and is not related to the superficially similar species such as



Stenus kamhaengi n. sp.: aedeagus, ventral view (Fig. 1). Stenus burckhardti n. sp.: aedeagus, ventral view (Fig. 2). Stenus mongkuti n. sp.: damaged aedeagus as mounted (Fig. 3); reconstructed outline of median lobe and parameres (Fig. 4). Stenus guenai n. sp.: aedeagus, ventral view (Fig. 5); male IXth sternite (Fig. 6); male VIIIth sternite (Fig. 7). Stenus explanipennis n. sp.: aedeagus, ventral view (Fig. 8); male IXth sternite (Fig. 9); male VIIIth sternite (Fig. 10).

S. dentellus Bck. or to those of the gestroi group. It differs from the majority of other members of the guttalis group by the apico-laterally rounded and finely multi-denticulate ninth abdominal sternite and by virtue of its immaculate elytra.

Facies and sculpture of *S. guttalis* et al., Black; legs and palpi testaceous, the knees broadly infuscate; antennae with first and base of second segments pale testaceous, segments II-VIII dark testaceous, the clubs dark brown. All surfaces finely microreticulate between the punctures.

Proportions of Holotype: Length: ca. 5.7 mm. Breadth of head: 104; average distance between eyes: 52; average distance between frontal sulci: 19; length of antenna: 115; length of pronotum: 76; greatest breadth of pronotum (2/5ths from neck): 71; breadth of elytra: 103; maximum breadth of elytron: 90; length of meta-tibia: 90; length of meta-tarsus: 66 (I: 30; II: 10; III-V: 26).

The aedeagus, with partially everted inner sac, was damaged during dissection. A figure (3) is given of the parts as they are now mounted in Euparal, and (4) of the reconstructed outline.

Two other members of the guttalis group from continental South East Asia with rounded and finely denticulate, not strongly toothed apico-lateral angles of the ninth sternites, *S. aestivalis* Rougemont and *S. dentelloides* Rougemont both differ from the new species by their maculate elytra, slightly finer and more shiny sculpture of the fore-bodies, and by the entirely rugosely punctured vertex of head; in the new species the base between the frontal furrows in partly impunctate (more extensively in the female Paratype). *S. dentelloides* is further distinguished from *S. mongkuti* n. sp. by its narrower head and shorter tarsi (ratio of meta-tarsi: 6: 7). The other immaculate member of the guttalis group known from Thailand, *S. iniquus* Bck. differs from *S. mongkuti* by its much narrower head (ratio: 4: 5), shallower frontal furrows with more prominent and homogenously punctured median area of vertex, by the strongly toothed apico-lateral angles of the ninth sternite, and by the male sexual characters.

Stenus ("Hypostenus") iniquus Bck.

Stenus iniquus L. Benick, 1931, Wien. ent. Zlg. 48: 138.

Stenus iniquus, ROUGEMONT 1983, Nat. Hist. Bull. Siam Soc. 31: 35.

1 °: Phetchaburi, Kaeng Krachan Nat. Pk. 300-400 m, 17.XI.1985; 2 ♀ ♀: Chanthaburi, Khao Sabap Nat. Park 150-300 m, 23-24.XI.1985; 1 °: Chiang Mai, 33 km NE Chiang Mai 500 m, 3.XI.1985; 1 ♀: Chiang Mai, Rd. to Wab Pang An, 50 km NE Chaing Mai 900 m, 3.XI.1985 (in Mus. Geneva).

Stenus ("Hypostenus") dentellus Bck.

Stenus dentellus L. Benick.

19: Mae Hong Son, Tom Lok, 8 km N Mae Lang 700 m, 14.XI.1985 (in Mus. Geneva).

This insect agrees well with *S. dentellus* Bck. from Burma, particularly by virtue of the long tarsi which distinguish it from many similar species belonging to the guttalis group, but without a male a definite determination is impossible. In any case this taxon is new to Thailand.

Stenus (Parastenus) feae Fv.

Stenus feae Fauvel, 1895, Revue Ent. 14: 211.

Stenus feae, ROUGEMONT 1981, Annali Mus. civ. Stor. nat. "Giacomo Doria" 83: 382.

2 ° ° and 3 ° ° : Chiang Mai, Doi Inthanon 1250 m and 1650 m, 6 and 7.XI.1985; 5 ° ° : Chiang Mai, Doi Suthep 1050 m, 5.XI.1985 (in Mus. Geneva).

Stenus (Parastenus) circumflexus Fv.

Stenus circumflexus Fauvel, 1895, Revue Ent. 14: 211.

Stenus circumflexus, Rougemont 1983, Nat. Hist. Bull. Siam Soc. 31: 46.

1 or and 2 ♀ ♀: Chiang Mai, Doi Suthep 1050 and 1400 m, 5.XI.1985; 1♀: Chiang Mai, Doi Inthanon 1250 m, 6.XI.1985 (in Mus. Geneva).

Stenus (Parastenus) gestroi ssp.

Stenus gestroi Fauvel, 1895, Revue Ent. 14: 212.

Stenus gestroi ssp., ROUGEMONT 1983, Nat. Hist. Bull. Siam. Soc. 31: 52.

11 exx.: Chiang Mai, Doi Suthep 1050 m and 1400 m, 5.XI.1985 (in Mus. Geneva).

This is the form from the same locality which I described in my 1983 article. It is distinct from other continental forms of the species, but should not be named until the group has been revised.

Stenus (Parastenus) gestroi ssp.

2 ♂ ♂ and 2 ♀ ♀: Chanthaburi, Khao Yai Nat. Park 750-850 m, 26.XI-3.XII.1985 (in Mus. Geneva; 1 ex. in coll. Rougemont).

This new form has the same narrow apex of the median lobe of the aedeagus as the form from Doi Suthep, but is a smaller insect, with immaculate elytra.

Stenus (Parastenus) luteomaculatus Rgmt.

Stenus luteomaculatus Rougemont, 1983, Nat. Hist. Bull. Siam Soc. 31: 48.

3 ℃ ♂ and 1 ♀: Chiang Mai, Doi Inthanon 2500 m, 9.XI.1985 (in Mus. Geneva).

This species was described from four other exx. which I collected from the same locality. No other records are known.

Stenus (Parastenus) jaccoudi Rgmt.

Stenus jaccoudi Rougemont, 1983, Annali Mus. civ. Stor. nat. "Giacomo Doria" 84: 642. 1 Q: Chiang Mai, Doi Inthanon 1000 m, 8.XI.1985 (in Mus. Geneva).

I described this species on a small series from North Shan State in Burma and two exx. from Malaysia, and have since collected a long series in the Cameron Highlands. It is new to Thailand.

Stenus (Parastenus) pallidipes Cam.

Stenus pallidipes Cameron, 1930, Tijdschr. Ent. 73: 328.

2 ° ° and 2 ° ° : Chiang Mai, Doi Inthanon 1720 m, 1250 m, 2500 m, 6, 7, 9.XI.1985; 1 ° : Chiang Mai, Doi Suthep 1050 m; 1 ° and 2 ° ° : Phetchaburi, Kaeng Krachan Nat. Pk. 300-450 m, 17, 18.XI.1985 (in Mus. Geneva; 1 ex. in coll. Rougemont).

New to Thailand. The species was described from West Sumatra, Puthz has recorded it from Vietnam, and I have taken it in the Cameron Highlands, Malaysia, whence it is also new.

Stenus (Parastenus) pilicornis Fv.

Stenus pilicornis Fauvel, 1895, Revue Ent. 14: 208.

1 ° : Chiang Mai, Doi Inthanon 1720 m, 9.XI.1985; 1 ♀ : Chiang Mai, Doi Suthep 1450 m, 4.XI.1985; 1♀ : NE Bankok, Khao Yai Nat. Park 750-850 m, 26.XI-3.XII.1985 (in Mus. Geneva).

Stenus (Parastenus) guenai n. sp.

or Holotype: Chiang Mai, Doi Suthep 1400 m, 5.XI.1985; 1♀ Paratype: Chiang Mai, Doi Inthanon 1720 m, 7.XI.1985 (Holotype in Mus. Geneva; Paratype in coll. Rougemont). 3 or or and 3♀♀ Paratypes: W. Bengal, Darjeeling District, 13 km au nord de Ghoom (route pour Bijambari), 1500 m, tamisage dans une forêt dégradée, 15.X.1978 (in Mus. Geneva and coll. Puthz).

The Paratypes from Darjeeling were mentioned by PUTHZ (1983, p. 143) although not described. S. guenai n. sp. is the sister of S. calcariventris Puthz; the two are so similar that only the proportions of the new species and a comparison of the two taxa are given fro its diagnosis. Like S. calcariventris, the new species' narrow abdominal paratergites and indistinct, because very small lobes of the fourth tarsomeres do not at first sight allow it to be immediately identified as a Parastenus.

Proportions of Holotype: Length: ca. 4.6 mm. Breadth of head: 75; average distance between eyes: 37; length of antenna: 92; length of pronotum: 65; greatest breadth of pronotum: 60; greatest length of elytron: 68; breadth of elytra just behind humeral angles: 60; greatest breadth of elytra (2/3rds from base): 77; length of meta-tibia (which bear a stout pre-apical spur in the male): 68; length of meta-tarsus: 56; meta-tarsal segments: I: 25; II: 11; III-V: 20.

Male: Abdominal sternite VII simple; sternite VIII with a rounded emargination (Fig. 6) flanked on either side by two long setae. Aedeagus: Fig. 5.

S. guenai n. sp. differs most conspicuously from S. calcariventris Puthz by its smaller size, which may be illustrated by the ratios of selected measurements of the two species: Breadth of head: 3: 3.5; breadth of pronotum: 3: 3.3; length of pronotum: 3: 3.3; breadth of elytra: 3: 3.6; length of elytron: 3: 3.4; meta-tibia: 3: 3.6; length of median lobe of aedeagus: 3: 4.6.

Other differences between the two taxa are as follows: the punctures of head leave a narrow shiny carina on the median axis in the new species (puncturation homogenous in *S. calcariventris*); the pronotum is proportionately slightly larger (see ratios of

measurements above) and the elytra more constricted anteriorly, their puncturation slightly coarser, the interstices forming longer, more distinct vermiculate rugae on the disc in the new species. The aedeagus is very similar in both species (the figure given here for *S. guenai* n. sp. appears to differ markedly from that given by PUTHZ (1983) of that of *S. calcariventris* because the partly extruded inner sac has displaced the internal structures, which are in fact almost identical to those of PUTHZ' species), but in *S. guenai* the parameres are shorter: a line drawn across the broadest point of the parameres bisects the apex of the median lobe, whereas in *S. calcariventris* it is level with the apex.

Stenus (Parastenus) explanipennis n. sp.

or Holotype, 1 or and 3 ♀ ♀ Paratypes: Chiang Mai, Doi Inthanon 1650 m, 7.XI.1985 (Holotype and 2 Paratypes in Mus. Geneva; 1 Paratype each in colls. Rougemont and Puthz).

This new species which appears to be related to *S. contaminatus* Puthz, *S. rougemonti* Puthz and others is best characterised by the broad, explanate elytra. Because these are slightly trapezoidal and a little broader than their greatest length, it runs in the key to the maculate oriental *Parastenus* given by PUTHZ (1981) to the montane species *S. evexifrons* Puthz, *S. montosus* Puthz and *S. brunescens* Puthz. The new species is however fully winged and does not have the characteristic facies and very coarse puncturation of the brachypterous montane species.

Length: 5-5.5 mm. Black; each elytron with a large, slightly elongate, ill-defined orange spot a little longer than 1/4 the total length of elytron.

Head broader than elytra measured just behind the humeral angles (81: 74) but narrower than these at the point of their greatest breadth (89). The vertex is broad (average distance between eyes: 48), deeply depressed beneath the level of eyes, the frontal sulci shallow, inconspicuous, because the median portion is not, or scarcely raised between them. The puncturation is homogenous, devoid of shiny impunctate areas, and coarse, the diameter of punctures equal to that of the basal antennal segment, and close, the sculpture sub-rugose, the interstices nevertheless forming narrow flattened shiny surfaces. Antennae long, extending to the base of pronotum, and very slender; antennal segments: I: 12; II: 8; III: 23; IV: 13; V: 12; VI: 9; VII: 9; VIII: 7; IX: 7; X: 6; XI: 10.

Pronotum elongate, convex, broadest a little before the middle, and homogenously punctured, without trace of a median furrow, the surface only slightly, irregularly uneven. The puncturation is as coarse as that of head, but the interstices are narrow, the sculpture quite rugose. Length of pronotum: 68; breadth: 60.

Elytra transverse, sub-trapezoidal, the greatest breadth about 3/4ths from base; the sides are explanate in posterior half, the dorsal surface narrowly concave before the lateral deflexion; this 'pinched' aspect provides one of the species' best distinguishing characters; in addition to the postero-lateral depressions, the elytra are more or less depressed in the anterior juxta-sutural area, their surfaces otherwise fairly even. The puncturation is similar to that of pronotum. The oblong orange spot on each elytron is centred on the posterior third, and slightly closer to the lateral margin than to the suture. Maximum length of elytron: 85; maximum breadth: 89; length of suture: 70.

The abdomen is not strongly tapered; the borders are narrow: the paratergites of segments IV and V are about as broad as the diameter of third antennal segment, shiny and impunctate, but with microsculpture, as is the rest of abdomen. The puncturation of

tergites is very coarse, the round punctures of the first visible segments only a little smaller than those of head, and almost as close; the puncturation is only a little finer on tergites VI and VII, much finer and shallower on tergite VIII. The whole surface of abdomen is clearly micro-reticulate and bears long pale pubescence which is recumbant on tergites, remarkably coarse and partly erect on the ventral surfaces. Sternite IX very finely denticulate between the prominent tooth-like apico-lateral angles (Fig. 10).

Length of meta-tibia: 75; length of meta-tarsus: 50; metatarsal segments: I: 20; II: 10; III-V: 20; lobes of IVth tarsomeres very long and slender.

Male: Legs and abdominal sternites III to VII unmodified; sternite VIII (Fig. 9) shallowly emarginate. Length of median lobe of aedeagus: 50; length inclusive of parameres: 68; the inner sac of the aedeagus (Fig. 8) is partially everted in both the available specimens; the parameres bear a series of 5 or 6 long setae along the base of the ventral margin of their very broadly dilated apices.

Stenus (Parastenus) n. sp.

1 ♀: Phetchaburi, Kaeng Krachan Nat. Park, 450 m, 19.XI.1985; 1 ♀: NE Bankok, Khao Yai Nat. Park, E Heo Suwat waterfalls, 800-900 m, 1.XII.1985 (1 ex. in Mus. Geneva; 1 ex. in coll. Rougemont).

This species is very similar to *S. kempi* Bnh., *S. crenicollis* Epp. and an undescribed species from Assam in coll. Puthz. Neither the external morphology nor the very simple spermatheca afford clear enough distinguishing characters to warrant describing the species on the basis of females alone.

RÉSUMÉ

L'auteur présente la liste des Steninae récoltés en Thaïlande pour le Muséum d'Histoire naturelle de Genève par I. Löbl et Burckhart. Six espèces sont signalées pour la première fois de Thaïlande, et les espèces suivantes décrites comme nouvelles: S. kamhaengi n. sp., S. burckhardti n. sp., S. mongkuti n. sp., S. guenai n. sp., S. explanipennis n. sp. et S. thanonensis n. sp. En outre deux autres formes nouvelles sont décrites sans être nommées.

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